

GAO

Report to the Chairman, Subcommittee on
Commerce, Consumer Protection, and
Competitiveness, Committee on Energy
and Commerce, House of Representatives

March 1989

STRATEGIC MINERALS

Implications of Proposed Takeover of a Major British Mining Company





United States
General Accounting Office
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National Security and
International Affairs Division

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The Honorable James J. Florio
Chairman, Subcommittee on Commerce, Consumer
Protection, and Competitiveness
Committee on Energy and Commerce
House of Representatives

Dear Mr. Chairman:

On January 17, 1989, you requested that we provide certain data related to the proposed takeover of Consolidated Gold Fields (Gold Fields), a British mining and construction materials company with substantial assets in the United States, by Minorco, a Luxembourg-based company controlled by South African interests. Specifically, you requested data on the free world output of five different minerals—gold, platinum, rutile and rutile substitutes, monazite, and zircon—that are currently controlled by entities substantially owned or controlled by South African interests and that would be controlled in the event of a successful Minorco takeover of Gold Fields.

As subsequently agreed with your office, we are providing data for total production of the five minerals in South Africa as well as production in other countries by companies in which there are South African ownership interests. As also agreed with your office, we are reporting all production in South Africa irrespective of whether there was South African ownership. We are also providing production data for Minorco and its affiliates and Gold Fields and its affiliates showing a variety of ownership scenarios. As discussed with your office, we are providing production data for each of the minerals where there is any known South African ownership in the companies that mine those minerals; it should be noted that South African ownership in companies outside South Africa is not fully known, particularly when the ownership interest is less than 10 percent. Further, current production data on South African linked companies¹ producing the five minerals outside South Africa excludes Gold Fields production, even though South African interests already own 29.4 percent of Gold Fields shares. Appendix II includes production data for each of the five minerals.

¹We used the phrase "production linked to South Africa" to describe the sum of all production in South Africa plus production outside South Africa by companies in which there is South African ownership.

As discussed with your office, we are also providing available data on aggregate South African investment in the United States.

Results in Brief

Almost half of the free world's gold production and almost all platinum production occurs in South Africa. Because Gold Fields has limited gold production outside South Africa and no platinum production, a successful Minorco acquisition of Gold Fields would have limited impact on the concentration of free world gold production and none on platinum production. However, a company in which Gold Fields has a substantial shareholding is a major producer of rutile, monazite, and zirconium; all of its production of these minerals is in Australia and the United States. A Minorco acquisition of Gold Fields without the sale of Gold Fields' shares in the company that produces these three minerals would substantially increase the portion of their production linked to South African interests. However, Minorco has made commitments on a number of occasions to divest itself of these shares if it succeeds in acquiring Gold Fields. Upon that divestiture, the portion of production of these minerals linked to South Africa will return to its pre-acquisition levels.

Background

Gold Fields, a British company, is a conglomerate with interests in mining and construction materials operations in the United Kingdom, South Africa, the United States, and Australia. Gold Fields and its subsidiaries and affiliates comprise the second largest gold producer in the free world, and accounted for about 13 percent of the free world's gold production in 1987. Table II.2 on page 17 shows Gold Fields' production of gold as well as the other four minerals.

Gold Fields has three major wholly owned subsidiaries, two of which are involved in producing construction materials. The third subsidiary, the Gold Fields Mining Corporation, is involved in gold mining in the United States.

Gold Fields also has significant interests in three other mining companies, Gold Fields of South Africa (GFSA), the Newmont Mining Corporation, and Renison Goldfields Consolidated. Gold Fields has a 38-percent interest in GFSA, the second largest gold producer in South Africa.² Gold Fields has a 48-percent interest in Renison, an Australian company that

²GFSA is also involved in developing the Northam platinum mine in South Africa. In addition to its holding in GFSA, Gold Fields has a 13-percent direct interest in the Northam mine, which is not yet producing any platinum.

is involved in gold production in Australia and Papua New Guinea, and is the world's largest producer of mineral sands, including rutile and rutile substitutes, monazite, and zirconium. Lastly, Gold Fields has a 49-percent interest in Newmont, which owns 90 percent of Newmont Gold, the largest gold producer in the United States. Newmont also owns 75 percent of Newmont Australia, an Australian gold producer. If Minorco is successful in acquiring Gold Fields, it has announced its intention to sell Gold Fields' interests in GFS, Renison, and Newmont.

Minorco is a publicly traded investment company based in Luxembourg. Its subsidiary and associated companies are primarily engaged in exploring for, producing, and processing natural resources, mainly in the United States and the United Kingdom. Minorco currently has no direct investments or activities in South Africa. Since its establishment in 1928, Minorco has been controlled by the South African-based Anglo American group of companies, notably the Anglo American Corporation of South Africa Limited and De Beers Consolidated Limited. Anglo American currently holds 39 percent of Minorco and De Beers 21 percent. In addition, two other associated Anglo American companies and the family of Harry F. Oppenheimer hold an additional 11 percent. Minorco has stated that if it successfully acquires Gold Fields, Anglo American's interest in its voting stock will be reduced to 27 percent and De Beers' interest to 14 percent under the terms of the takeover offer.

Currently, Minorco's principal holdings include Gold Fields itself, in which it has a 29.4 percent interest. Minorco is involved in mining small quantities of gold (apart from its interest in Gold Fields) in the United States and Brazil. Neither Minorco nor any of the companies in which it has ownership interests (except Gold Fields) are involved in mining the other four minerals. Anglo American, however, is a significant producer of gold and platinum and it produces a small quantity of baddeleyite, a zirconium mineral, through its interest in another South African company. In 1987, Anglo American and Minorco together accounted for about 22 percent of the free world's gold production and about 47 percent of its platinum production. (Table II.3 on p. 18 shows Minorco and Anglo American production of the five minerals.)

Events Surrounding Minorco's Proposed Acquisition of Gold Fields

Several proceedings have been initiated in the United States and abroad in an attempt to block Minorco's proposed acquisition of Gold Fields. In October 1988, Gold Fields filed a motion before the U.S. District Court of the Southern District of New York for a preliminary injunction to prevent the takeover. Gold Fields alleged that Minorco's proposed acquisition would be in violation of U.S. securities laws because certain material facts about the bidders were not revealed. It also alleged that the takeover would violate U.S. antitrust laws because it would lessen competition in the U.S. and world gold markets.

The District Court subsequently denied Gold Fields' motion under the securities laws for lack of jurisdiction, but granted Gold Fields' motion under the antitrust laws. The Court found that the probability that the takeover would substantially lessen competition in the gold market and cause irreparable harm was sufficiently great to warrant the granting of a preliminary injunction so that the allegations could be judged on their merits. In his decision, the judge noted that a preliminary injunction is generally the only effective remedy for an unlawful merger because once a takeover has occurred it would be difficult, if not impossible, to undo. Minorco subsequently filed an appeal with the U.S. Court of Appeals for the Second Circuit to have the injunction overturned. As of March 1, 1989, the Circuit Court had not decided Minorco's appeal.

In October 1988, the United Kingdom's Secretary of State for Trade and Industry requested the British Monopolies and Mergers Commission (MMC) to investigate whether Minorco's proposed acquisition of Gold Fields would operate against the public interest. In its investigation, the MMC considered the effects of the proposed acquisition on competition in the world markets for gold, platinum, rutile and rutile substitutes, monazite, and zirconium. In February 1989, the MMC unanimously concluded that the proposed acquisition "may be expected not to operate against the United Kingdom's public interest," thus removing any United Kingdom objection to Minorco's bid. In its report, the MMC noted Minorco's commitments to dispose of Gold Fields' interests in GFSA, Renison, and Newmont and considered the proposed acquisition both under the assumption that the proposed divestments would occur and that they would not occur or be delayed. The MMC cleared the Minorco bid without conditioning it on the proposed divestments.

At the request of Gold Fields, the Commission of the European Communities also investigated the proposed Minorco takeover. In February 1989, the Commission announced that it intended to reject Gold Fields'

complaint against the proposed takeover. In its announcement, the Commission stressed the importance of maintaining competition in the platinum market and said it would closely monitor developments in the platinum industry. The Commission noted that it had received certain formal assurances from Minorco that, if the takeover occurred, Minorco would sell Gold Fields' platinum interests within a specified time period and that the sale would not be to Anglo American, De Beers, or any of their associates.

In October 1988, Gold Fields sent a letter to the President of the United States requesting him to exercise his authority pursuant to section 721 of the Defense Production Act of 1950 (50 U.S.C. App. 2158 et. seq.), as amended by the Omnibus Trade and Competitiveness Act of 1988 (P.L. 100-418), to investigate whether the proposed takeover represented a threat to U.S. national security.³ Gold Fields' request was referred to the Committee for Foreign Investment in the United States, an interagency working group chaired by the Department of Treasury, which is tasked with investigating the effect on national security of acquisitions or takeovers that could result in foreign control of U.S. businesses. The Committee initiated an investigation in October, but it was suspended in November when Minorco's bid for Gold Fields lapsed pending the outcome of the MMC investigation.

On February 20, 1989, Minorco announced that after receiving clearances from the MMC and the European Commission to proceed with the acquisition, it was renewing its offer for Gold Fields. However, it noted that the offer was contingent upon the U.S. Second Circuit Court overturning the District Court's preliminary injunction enjoining Minorco from making further purchases of Gold Fields' shares. On February 21, 1989, Minorco notified the Committee for Foreign Investment in the United States that it had made a new offer for Gold Fields.

Effect of the Proposed Acquisition on Production of Selected Minerals

Gold, platinum, rutile and rutile substitutes, monazite, and zirconium have both strategic uses, such as in electronics, and non-strategic uses, such as jewelry for gold and platinum and paint pigment for rutile. U.S. Bureau of Mines officials indicated that the five minerals generally have limited strategic uses and that substitutes for the five minerals can generally be found for use in producing strategic items.

³This legislation gives the President the authority to initiate appropriate action to prohibit or suspend any foreign takeover attempt if he determines that the resulting foreign control of the U.S. company represents a threat to national security.

The following sections briefly describe each of the five minerals, including their possible strategic uses, and give total free world production data for each mineral by country as well as for Gold Fields and its associated companies, for Minorco and Anglo American, and for total South African production. These sections also include a discussion of the implications of a Minorco acquisition of Gold Fields on mineral concentration under (1) the current ownership situation, (2) acquisition of Gold Fields with the sale by Minorco of Gold Fields' interests in GFSA, Newmont, and Renison (the divestiture to which Minorco has committed), and (3) acquisition without the divestiture of Gold Fields' interests in these companies. It is possible for the reader to assess the implications of alternate ownership scenarios by using the data in tables II.1 through II.3 on pages 17 and 18 and in figure II.1 on page 19.

Gold

Gold is used mainly in jewelry, electronics, and dentistry. According to Gold Fields Gold 1988 report, gold's strategic use is in electronics where it is the metal of preference in a wide variety of electronic components because its resistance to corrosion and its excellent conductivity outweigh its cost. There have been attempts to introduce cheaper alternatives in the electronics field from time to time, particularly during periods of high gold prices, but substitutes such as silver and palladium do not offer the same reliability or quality; these properties make the use of gold critical in the defense and aerospace industries.

In 1987, 47 percent of the gold produced in the free world was mined in South Africa. This includes 10 percent produced by GFSA, in which Gold Fields is a 38-percent shareholder. Gold Fields and its associated companies produced about 13 percent of all the gold produced in the free world in 1987, including its South African production. Together, Minorco and Anglo American accounted for about 22 percent of total free world gold production in 1987, most of it in South Africa.

Total gold production linked to South Africa in 1987 represented 48 percent of the total produced in the free world. If Minorco acquires Gold Fields and fully implements the proposed divestments of its shares in GFSA, Newmont, and Renison, total production linked to South Africa will remain at about 48 percent of total free world production. If Minorco does not implement the proposed divestments, South African linked production will increase to about 51 percent of free world production.

Platinum

Platinum is mainly used in jewelry and in catalytic converters for toxic emission control in vehicles. It is also used in the electrical, petroleum refining, and chemical industries.

Platinum occurs together with other platinum group metals, which include palladium, rhodium, ruthenium, iridium, and osmium. World platinum production is concentrated in very few countries, principally South Africa, Canada, and the Soviet Union. In 1987, South Africa produced 91 percent of the platinum produced in the free world. Gold Fields and its associated companies did not produce any platinum in 1987. As noted previously, however, GFSa is involved in developing the Northam platinum mine in South Africa, which is expected to begin production in 1992. Anglo American accounted for 47 percent of the platinum produced in the free world in 1987, all of it in South Africa; Minorco had no platinum production.

Platinum production linked to South Africa in 1987 represented 91 percent of free world production.⁴ Since none of the Gold Fields' companies currently produces any platinum, there will be no change in free world production if Minorco acquires Gold Fields.

Rutile and Rutile Substitutes

Natural rutile and rutile substitutes (synthetic rutile, titanium slag, and ilmenite) are primarily used to produce titanium dioxide pigment used for paints, paper, and plastics. Natural and synthetic rutile and a portion of high-grade titanium slag can also be used to produce titanium metal, which is used in the aerospace industry because of its high strength-to-weight ratio and resistance to corrosion. Since the only strategic use of rutile and rutile substitutes is in the production of titanium metal, we have included production data only for natural and synthetic rutile and for the portion of titanium slag that can be used to produce titanium metal. According to the Bureau of Mines, two-thirds of the titanium slag produced in South Africa can be used in the production of titanium metal; titanium slag produced in other countries is not of sufficient quality for such use.

In 1987, South Africa produced 36 percent of the rutile and rutile substitutes (natural and synthetic rutile and the portion of slag that can be used to produce titanium metal) mined in the free world. Renison, the

⁴As agreed with your office, in total South African linked production we have included production by Lonrho, a wholly owned subsidiary of a British company that produces platinum in South Africa. Lonrho production represented 5 percent of total free world platinum production in 1987.

only Gold Fields company producing rutile, produced 18 percent of the rutile and rutile substitutes produced in the free world in 1987, all of it in Australia and the United States. Neither Minorco nor Anglo American produced any rutile or rutile substitutes in 1987.

Total 1987 production linked to South Africa was 44 percent of the total amount of rutile and rutile substitutes produced in the free world. If Minorco acquires Gold Fields and fully implements the proposed divestments, production linked to South Africa will continue to represent 44 percent of total free world production. If Minorco does not implement the proposed divestments, South African linked production will increase to 62 percent of total free world production.

Monazite

Monazite occurs in a number of mineral sands deposits. It is the most abundant of 10 separate heavy rare earth elements, representing almost two-thirds of world production. Heavy rare earths have several strategic applications. They are used in permanent magnets which have a variety of military applications, including aircraft, radar, and satellites. They can also be used as an additive to uranium fuel for nuclear reactors and in paints to protect armored vehicles and military installations against radiation. Rare earths are also widely used in the electronics industry and are essential components in the production of high-technology ceramics, phosphors, optical glass, ceramic condensers, and bubble memory systems. According to the MMC report, consumption of the rare earths in all these applications is not large but is critically important. The term "rare earths," however, is a misnomer in that they are found in abundance.

South Africa did not produce any monazite in 1987. Renison, the only Gold Fields company producing any monazite, produced 37 percent of all the monazite mined in the free world in 1987. Neither Minorco nor Anglo American produced any monazite in 1987.

Total linked South African monazite production in 1987 represented only 2 percent of the total produced in the free world. If Minorco acquires Gold Fields and fully implements the proposed divestments, total production linked to South Africa will continue to represent 2 percent of total free world production. If Minorco does not implement the proposed divestments, production linked to South Africa will increase to 39 percent of total free world production.

Zirconium

Zirconium is composed of two minerals, zircon and baddeleyite. Zircon accounts for 97 percent of all the zirconium minerals mined. According to the MMC report, over 80 percent of worldwide zirconium consumption is accounted for by refractory, ceramic, abrasive, and foundry uses. Less than 5 percent of the zircon produced is used for the production of zirconium metal, which together with hafnium (a metal derived from certain zircon containing sands), has applications in the nuclear power industry.

In 1987, South Africa accounted for 21 percent of the zirconium produced in the free world. Renison, the only Gold Fields' company producing zirconium, produced 40 percent of all the zirconium produced in the free world in 1987, all of it in Australia and the United States. Anglo American produced about 1 percent of the total zirconium mined in the free world in 1987 through its ownership interest in a South African company which produces baddeleyite; Minorco produced no zirconium in 1987.

In 1987, zirconium production linked to South Africa represented 32 percent of total free world production. The production outside South Africa was accounted for by one mineral-producing company with significant South African ownership interests not controlled by Minorco or Anglo American. If Minorco acquires Gold Fields and fully implements the proposed divestments, there will be no change in South African linked production. If Minorco does not implement the proposed divestments, South African linked production will increase to 72 percent.

South African Investment in the United States

According to the Department of Commerce's Bureau of Economic Analysis (BEA), which is responsible for collecting foreign investment data, little information is available on South African investment in the United States. In many cases, South African investment data is not published because there are relatively few South African companies with investments in the United States and it would be easy to identify individual companies from the aggregate data. Therefore, BEA does not publish much data on South African investment because it could reveal company proprietary information.

According to preliminary 1986 BEA data, the latest available, South Africa had an ownership interest in 41 companies in the United States which had a net income of \$624 million and about \$18 billion in total sales. South Africa reported \$21 million in new investments in the

United States in 1986. According to BEA, the cumulative value of South African investment in the United States was \$68 million as of 1987.

According to Commerce's International Trade Administration, in 1987 there were seven major acquisitions or partial acquisitions of U.S. companies by South African companies. Five of these acquisitions were of companies involved in the mining industry; one was of a company involved in electric and electronic equipment, and the last was of a company involved in wholesale trade of nondurable goods. Six of the seven acquisitions (and all those involving companies in the mining industry) were made by the Harry F. Oppenheimer family interests.

As agreed with your office, we did not obtain comments on this report from any federal agencies or representatives of Minorco or Consolidated Gold Fields.

Unless you announce its contents earlier, we plan no further distribution of the report until 30 days after its issue date. At that time we will provide copies to the Committee on Foreign Investment in the United States; the Departments of Commerce, Interior, and State; and to other interested parties upon request. The principal GAO staff members responsible for this review were Steven Sternlieb, Elizabeth Sirois, and Michael Kassack.

If you have any questions, please contact me on (202) 275-4812.

Sincerely,

A handwritten signature in black ink that reads "Allan I. Mendelowitz". The signature is written in a cursive, slightly slanted style.

Allan I. Mendelowitz, Director
Trade, Energy, and Finance Issues

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Abbreviations

BEA	Bureau of Economic Analysis
GFMC	Gold Fields Mining Corporation
GFSA	Gold Fields of South Africa
MT	Metric Tons
MMC	Monopolies and Mergers Commission

Objectives, Scope, and Methodology

The Chairman, Subcommittee on Commerce, Consumer Protection, and Competitiveness, House Committee on Energy and Commerce, asked us to assess the potential impact of the acquisition of Consolidated Gold Fields. Specifically, he asked us to examine how it would affect the portion of free world production of gold, platinum, rutile and rutile substitutes, zircon, and monazite that is substantially owned or controlled by South African interests. As subsequently agreed with the Chairman's office, we obtained data on all production of these five minerals in South Africa and outside South Africa by companies that are owned at least in part by South African interests. This approach was necessary because of the impracticality of our establishing the existence of effective South African control absent majority ownership. We also obtained available data on aggregate South African investment in the United States.

To determine the extent of South African ownership interest in free world production for each of the five minerals, we obtained data from several sources. Free world production data were provided by the Department of the Interior's Bureau of Mines. In its investigation of Minorco's proposed acquisition, the MMC also developed data on free world production to calculate the proportion of each company's production of the five minerals. The MMC's data differ for four of these minerals by 4 to 8 percent from that of the Bureau of Mines. For the fifth mineral, rutile, the Bureau's data are 35 percent higher than the MMC's, because the two entities use different estimates of the portion of titanium slag that can ultimately be used to produce titanium metal. We discussed the differences with Bureau officials, who advised us that they believed their data for the four minerals were more current, which would explain the difference, and that their information on rutile was recently supplied by one of the major titanium producers. Since we were unable to explore the matter with the MMC in the time available, we used the Bureau's data for free world production in all our calculations.

Consolidated Gold Fields and Minorco provided us production data by country for each of the companies in which they had shareholdings as well as for Anglo American, which has a large shareholding in Minorco. They also provided their production estimates for other companies which had South African ownership interests. Gold Fields' and Minorco's data were generally quite similar. To calculate the proportion of each mineral's production linked to South Africa, we used Gold Fields' and Minorco's data for their respective companies' production. For data on the production of other companies linked to South Africa, we used information provided by the MMC, Gold Fields, and Minorco. We

divided these data by the Bureau of Mines free world production data to estimate world market shares.

The only exception to our categorization of South African ownership interest was a major South African minerals producer called Gencor. Anglo American has a 5-percent interest in Gencor which is described in the MMC's report as a portfolio investment. We consequently did not include Gencor's production in our data on Minorco/Anglo American production, but did include it in the South African production data as well as in the data on production outside South Africa by companies linked to South Africa.

In reporting production linked to South Africa, we included all production occurring in South Africa irrespective of ownership. This included GFSA's gold production, all of which occurs in South Africa, even though Gold Fields, a British company, had a 38-percent shareholding in GFSA. Anglo American has a 22-percent shareholding in GFSA and Rembrandt, another South African company, a 10-percent shareholding. We had no data on the other shareholders' identity. As discussed with the Chairman's office, we linked all GFSA's gold production to South Africa in considering the various scenarios because all its production occurs there.

Because the principal concern over access to titanium feedstocks pertains to titanium metal, because of its strategic uses, we confined our data to rutile and its substitutes suitable for producing titanium metal. These feedstocks consist of rutile, synthetic rutile, which is produced from sand ilmenite, and a portion of high-grade titanium slag, also produced from sand ilmenite. The sand ilmenite that can be used to produce high-grade titanium slag is found only in South Africa.

In developing our production data and developing an understanding of the proceedings surrounding Minorco's proposed acquisition of Gold Fields, we held extensive discussions with representatives of both companies and with the Bureau of Mines mineral experts responsible for each of the five minerals. We also discussed the matter with Treasury Department officials who provide the staffing for the interagency Committee on Foreign Investment in the United States.

We obtained data on South African investment in the United States from the Department of Commerce's Bureau of Economic Analysis, which is responsible for collecting data on foreign investment in the United States by conducting legislatively mandated surveys. Its most current detailed data are for 1986, although it also has some data on investment

activity in 1987. We also obtained data on reported South African acquisitions in the United States in 1987 from Commerce's International Trade Administration, which tracks such information through media clippings and identifies the investment parties, something the Bureau's data do not do.

We conducted our work in January and February 1989 in accordance with generally accepted government auditing standards.

Selected Mineral Data

Table II.1: Percent of Free World Production of Selected Minerals by Country, 1987

Production	Gold (mt)^b	Platinum (troy oz.)	Rutile and rutile substitutes (mt)	Monazite^a (mt)	Zirconium^a (mt)
Total World	1,632	3,867,000	1,148,000	26,305	847,000
Total Free World	1,276	2,867,000	1,139,000	26,305	747,000

Percent of free world production

Country					
South Africa	47	91	36	0	21
Australia	8	(c)	33	46	59
Canada	9	7	0	0	0
United States	12	1	10	2 ^d	13 ^e
Other free world	23	2	20	52	6

^aProduction figures are estimated.

^bMetric tons.

^cLess than one-half of 1 percent.

^dBased on production figures provided by Consolidated Gold Fields.

^eBased on production figures provided by the MMC.

Source: U.S. Bureau of Mines, except as noted.

Table II.2: Consolidated Gold Fields Production of Selected Minerals, by Company and Country, 1987

Company and Country	Gold (mt)	Platinum (troy oz.)	Rutile and rutile substitutes (mt)	Monazite (mt)	Zirconium (mt)
GfSA:					
South Africa	128	0	0	0	0
Newmont:					
Australia	9	0	0	0	0
United States	18	0	0	0	0
GFMC^a:					
United States	6	0	0	0	0
Renison:					
Australia	3	0	181,000	6,200	271,000
Papua New Guinea	1	0	0	0	0
United States	0	0	25,000	601	25,000
Total	165	0	206,000	9,801	296,000

^aGold Fields Mining Corporation.

Source: Consolidated Gold Fields.

Appendix II
Selected Mineral Data

**Table II.3: Minorco/Anglo American
Production of Selected Minerals by
Country, 1987^a**

Company and Country	Gold (mt)	Platinum (troy oz.)	Rutile and rutile substitutes (mt)	Monazite (mt)	Zirconium (mt)
Minorco:					
South Africa	0	0	0	0	0
Brazil	9	0	0	0	0
United States	2	0	0	0	0
Anglo American:					
South Africa	266 ^b	1,340,000	0	0	10,000
Total	277	1,340,000	0	0	10,000

^aExcludes Consolidated Gold Fields production.

^bAnglo American annualized its 1987 gold production figure with first half 1988 production to account for a strike at the major mines which caused the 1987 figures to be distorted.

Source: Minorco.

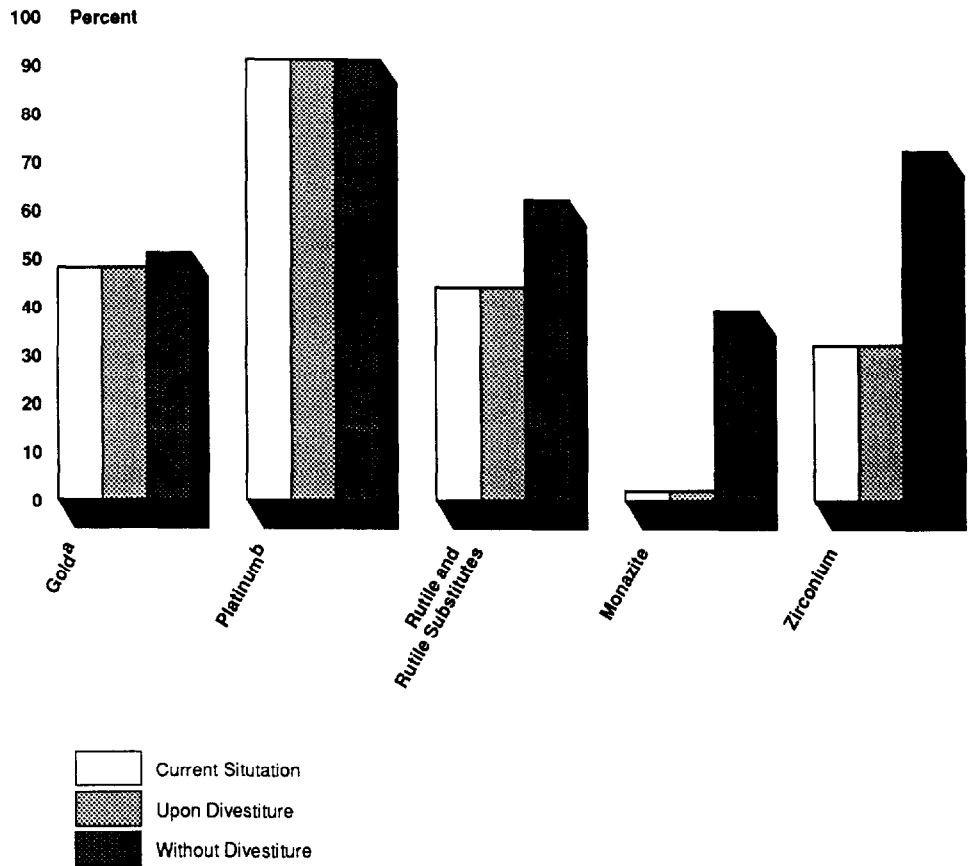
**Table II.4: Minorco/Anglo American
Portion of Total Free World Production of
Selected Minerals With Successful
Takeover^a**

Figures in percent					
Scenario	Gold	Platinum	Rutile and rutile substitutes	Monazite	Zirconium
Divestiture of GFSA, Newmont, and Rensselaer	22	47	0	0	1
No Divestiture	35	47	18	37	41

^aBased on U.S. Bureau of Mines 1987 free world production data shown in table II.1.

Source: Consolidated Gold Fields, Minorco, and MMC.

Figure II.1: Portion of Total Free World Production of Selected Minerals Linked to South Africa (Percentages Based on 1987 Production Data)



^aIncludes South African production of GFSA, a Gold Fields company.

^bIncludes South African production of Lonrho, a wholly owned subsidiary of a British company.

Source: Consolidated Gold Fields, Minorco, MMC, and U.S. Bureau of Mines.